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☐	L9	prostate specific protein and Nk-3	0
☐	L8	L7 and Nk-3	4
☐	L7	L6 and prostate	51
☐	L6	(carter kenneth)[IN]	142
☐	L5	(carter kenneth)[IN] AND (prostate specific protein)	0
☐	L4	(carter kenneth)[IN] AND (prostate protein)	0
☐	L3	(carter kenneth c)[IN] AND (prostate protein)	0
☐	L2	(he wei-wu)[IN] AND (prostate specific gene)	4
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                  USPATFULL/USPAT2
 NEWS  8  MAY 30  The F-Term thesaurus is now available in CA/CAplus
 NEWS  9  JUN 02  The first reclassification of IPC codes now complete in
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 NEWS 15  AUG 09  INSPEC enhanced with 1898-1968 archive
 NEWS 16  AUG 28  ADISCTI Reloaded and Enhanced
 NEWS 17  AUG 30  CA(SM)/CAplus(SM) Austrian patent law changes
 NEWS 18  SEP 11  CA/CAplus enhanced with more pre-1907 records

 NEWS EXPRESS  JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
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=> s NK-3 and prostate and protein
L1 8 NK-3 AND PROSTATE AND PROTEIN

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L2 ANSWER 1 OF 4 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
AN 2004-08081 BIOTECHDS
TI Inhibiting neuronal cell death using neuronal marker genes and proteins, useful for diagnosing, preventing and/or treating optic nerve degeneration, Alzheimer's disease, diabetic retinopathy, Parkinson's disease and glaucoma;
involving vector-mediated gene transfer and expression in host cell for use in gene therapy
AU ZACK D J; QUIGLEY H A
PA UNIV JOHNS HOPKINS
PI WO 2004007675 22 Jan 2004
AI WO 2003-US21738 14 Jul 2003
PRAI US 2002-395821 15 Jul 2002; US 2002-395821 15 Jul 2002
DT Patent
LA English
OS WPI: 2004-122916 [12]
AN 2004-08081 BIOTECHDS
AB DERWENT ABSTRACT:
NOVELTY - Inhibiting neuronal cell death comprises administering to a subject an isolated molecule comprising an antibody variable region which specifically binds to a neuronal marker (NM1) protein, whereby neuronal cell death is inhibited.
DETAILED DESCRIPTION - The neuronal marker (NM1) protein in the method cited above is microglobulin, beta-2-microglobulin + prostaglandin receptor F2a, glutathione S-transferase Yb subunit, GST subunit 4 mu (GSTM2), vascular cell adhesion protein 1 precursor (V-CAM 1), gamma-aminobutyric acid (GABA) transporter 2, VGF8A protein precursor, Transforming growth factor beta (TGF-beta) masking protein large subunit, erythropoietin precursor (EPO), protein arginine N-methyltransferase 1, signal transducer and activator of transcription 3 (STATS), ceruloplasmin precursor (CP), ferroxidase, clusterin (CLU), testosterone-repressed prostate message 2 (TRPM2), apolipoprotein J, sulfated glycoprotein 2 (SGP2), dimeric acid glycoprotein (DAG), heparin-binding growth factor 2 precursor (HBGF2), basic fibroblast growth factor (BFGF), fibroblast

growth factor 2 (FGF2), prostatropin, or plasminogen activator inhibitor 2A. INDEPENDENT CLAIMS are also included for the following: (1) a method of preventing neuronal cell death in a mammal, comprising administering to the mammal a nucleic acid molecule comprising a coding sequence for a neuronal marker (NM2) protein and/or the NM2 protein, whereby neuronal cell death in the mammal is inhibited or prevented; (2) method of identifying regions of neuronal cell death in a patient, comprising administering to a patient a molecule comprising an antibody variable region which specifically binds to NM1 protein, wherein the molecule is bound to a detectable moiety, and detecting the detectable moiety in the patient, thereby identifying regions of neuronal cell death; (3) a method of screening for neuronal cell death in a patient, comprising contacting a body fluid collected from the patient with a molecule comprising an antibody variable region which specifically binds to NM1 protein, or detecting an NM1 protein or a nucleic acid encoding the NM1 protein in a body fluid collected from the patient, wherein detection of cross-reactive material in the body fluid with the molecule indicates neuronal cell death in the patient; (4) a method of promoting neuronal cell death in a patient, comprising administering to a patient in need of neuronal cell death an NM1 protein or a nucleic acid molecule encoding the NM1 protein, whereby neuronal cell death in the patient is stimulated; and (5) a method to identify candidate drugs for treating neuronal cell death, comprising contacting cells which express one or more NM1 and/or NM2 genes and/or proteins with a test compound, determining expression or activity of the one or more NM1 genes and/or proteins by hybridization of mRNA of the cells to a nucleic acid probe which is complementary to the mRNA, and identifying a test compound as a candidate drug for treating neuronal cell death if it decreases expression or activity of the one and/or more NM1 and/or NM2 genes or proteins.

WIDER DISCLOSURE - Also disclosed are NM nucleic acids, polypeptides, host cells, vectors and antibodies used in the methods of the invention.

BIOTECHNOLOGY - Preferred Method: The NM2 protein is NM androgen binding protein, plasma kallikrein (rPK), Lim-2, embryonic motor neuron topographic organizer, HOMEOBOX PROTEIN LM-2 (LM/HOMEODOMAIN PROTEIN LHX5), DCC, netrin receptor, immunoglobulin gene superfamily member, former tumor suppressor protein candidate, N-myc proto-oncogene protein, M-phase inducer phosphatase 2 (MPI2), cell division control protein 25 B (CDC25B), von ebner's gland protein 2, VEG protein 2, VEGP2 + von ebner's gland protein 1, VEG protein 1, VEGP1, VEGP, synaptobrevin 1 (SYB1), vesicle-associated membrane protein 1 (VAMP1), 3-methylcholanthrene-inducible cytochrome P450 (P450MC), cytochrome P450 IA1 (CYPIA1), cytochrome P450 VU (CYP7), cholesterol 7-alpha-monooxygenase, cholesterol 7-alpha-hydroxylase, cyclic nucleotide-activated channel, olfactory, cytochrome P450 2E1 (CYP2E1), P450-J, P450RLM6, high affinity L-proline transporter, neuronal acetylcholine receptor protein alpha-3 chain precursor, sodium channel I, voltage-dependent L-type calcium channel alpha 1C subunit (CACNA1), cardiac muscle L-type calcium channel alpha 1 polypeptide isoform 1 (CCHL1A1), rat brain class C (RBC), CACH2, CACN2, ATPase, hydrogen-potassium, alpha 2a subunit, sodium channel, amiloride sensitive, alpha subunit, SCNEA, alpha NACH, SCNN1A, RENAC, cardiac specific sodium channel alpha subunit, potassium channel protein CDRK, neuronal acetylcholine receptor protein alpha 5 subunit precursor (CHRNA5, ACRA5), sodium channel SHRSPHD, gamma subunit, epithelial, sodium channel protein 6 (SCP6), renal organic anion transporter (ROAT1) + multispecific organic anion transporter (OAT1), neuronal acetylcholine receptor protein alpha 6 subunit precursor (CHRNA6, ACRA6), purinergic receptor P2X3, ligand-gated ion channel, calcium channel, alpha 1 beta, sodium channel, beta 1 subunit,

neuronal acetylcholine receptor protein alpha 7 subunit precursor (CHRNA7, ACRA7), neuronal nicotinic acetylcholine receptor alpha 2 subunit, proton gated cation channel drasic, sensory neuron specific, channel-inducing factor precursor (CHIP), corticosteroid-induced protein, MYELM BASIC PROTEIN S (MBPS), organic cation transporter 2 (OCT2), ASIC1 proton gated cation channel, glycine receptor alpha 3 subunit precursor (GLRA3), voltage-gated K+ channel protein, RK5, potassium channel protein, voltage-activated calcium channel alpha-1 subunit (RBE-II), nickel-sensitive T-type calcium channel alpha-1 subunit, inward rectifier potassium channel subfamily J member 2 (KCNJ2), RBL-IRK1, eek proto-oncogene, protein tyrosine kinase, eph/elk-related, prostaglandin D2 receptor, activin receptor type I precursor (ACVR1, ACTR1), serine/threonine-protein kinase receptor R1 (SKR1), TGF-B superfamily receptor type I (TSR-I), ACVRLK2, calcitonin receptor precursor (CT-R), C1AJC1E, prostaglandin E2 receptor EP2 subtype (PGE receptor EP2 subtype, PTGER2), prostanoid EP2 receptor, NEUREXINI-BETA PRECURSOR, Non-processed neurexin I-beta Synaptic cell surface proteins + NEUREXIN I-ALPHA PRECURSOR, Non-processed neurexin I-alpha Synaptic cell surface proteins, gastrin-releasing peptide precursor (GRP), neuromedin C, serotonin receptor, 5-hydroxytryptamine 6 receptor (5-HT-6), ST-B17, possesses high affinity for tricyclic psychotropic drugs, platelet activating factor receptor, alpha 2B adrenergic receptor (ADRA2B), alpha 2B adrenoceptor, VASOACTIVE INTESTINAL POLYPEPTIDE RECEPTOR 2 PRECURSOR (VIP-R-2) (PITUITARY ADENYLATE CYCLASE ACTIVATING POLYPEPTIDE TYPE M RECEPTOR) (PACAP TYPE M RECEPTOR) PACAP-R-3), transforming growth factor beta 3 (TGF-beta3), antiproliferative growth factor, vasopressin V1b receptor, prostaglandin E2 receptor EP4 subtype, alpha 2C adrenergic receptor (ADRA2C), alpha 2C adrenoceptor, vasopressin/arginine receptor, V1a, prostaglandin F2 alpha receptor, growth hormone secretagogue receptor 1 (GHSR), cholecystokinin receptor, NMDAR2A N-METHYL-D-ASPARTATE RECEPTOR SUBUNIT, P2U PURINOCEPTOR 1 (ATP RECEPTOR) (P2U1) PURINERGIC RECEPTOR), estrogen receptor beta (ER-beta), ESR2, NR3A2, kappa-type opioid receptor (KOR-I), lutropin-choriogonadotropic hormone receptor, beta 1 adrenergic receptor (ADRB1R), 5-hydroxytryptamine (serotonin) receptor 1B, 5-HT1B, adrenergic receptor, beta 2, muscarinic acetylcholine receptor M3 (MACHR), B1 bradykinin receptor, mu opioid receptor (MUOR1), mu-type opioid receptor (MOR-I), opioid receptor B, serotonin 5HT2 receptor, somatostatin receptor 2, melatonin receptor, somatostatin receptor, galanin receptor 1, neuromedin B receptor, transmembrane receptor UNC5H1, pancreatic polypeptide receptor PP1, interleukin-2 QL-2), somatostatin, luteinizing hormone, alpha, mast cell protease 1 precursor (RMCP-I), secretory protein probasin (M-40), E-selectin precursor, endothelial leukocyte adhesion molecule 1 (ELAM-I), leukocyte-endothelial cell adhesion molecule 2 (LECAM2), CD62E, Protein kinase C-binding protein beta1S, RING-domain containing, kidney band 3 anion exchange protein, SLC4A1, AE1, L-selectin precursor, lymph node homing receptor, leukocyte adhesion molecule-1 (LAM-1), LY-22, lymphocyte surface MEL-14 antigen, leukocyte-endothelial cell adhesion molecule 1 (LECAM1), CD62L, Wilms1 tumor protein (WT1), tumor suppressor, CD28, T-cell surface antigen, c-fgr proto-oncogene , CD3, gamma chain, cathepsin E, S-myc proto-oncogene protein, myc-related , G protein-activated inward rectifier potassium channel 4 (GIRK4), inward rectifier potassium channel subfamily J member 5 (KCNJ5), heart KATP channel, KATP-I, cardiac inward rectifier (CIR), KIR3.4, fructose (glucose) transporter, sodium channel protein 6 (SCP6), sodium channel, beta 1 subunit, sodium-hydrogen exchange protein -isoform 2 (NHE-2), PMCA, ATP2B2, calcium-transporting ATPase plasma membrane (brain isoform 2, EC 3.6.1.38), calcium pump, ATPase, sodium/potassium, gamma subunit, G protein-activated inward rectifier potassium channel 1 (GIRK1), inward rectifier potassium channel subfamily J member 3 (KCNJ3), KGA, KGB1, KIR3.1, proton gated cation channel drasic, sensory neuron specific, sodium channel 2, brain ATPase,

copper-transporting, Menkes protein, channel-inducing factor precursor (CHIF), corticosteroid-induced protein, synaptotagmin II, carbonic anhydrase 4, calcitonin receptor precursor (CT-R), C1A/C1B, vasopressin V2 receptor, 5-hydroxytryptamine (serotonin) receptor IB, 5-HT1B, gamma-aminobutyric acid receptor alpha 4 subunit precursor (GABA(A) receptor, GABRA4), vitamin D3 receptor (VDR), 1,25-dihydroxyvitamin D-3 receptor, NR1I1, muscarinic acetylcholine receptor M5 (CHRM5), somatostatin receptor, galanin receptor 1, granulocyte-macrophage colony-stimulating factor (GM-CSF), colony-stimulating factor (CSF), guanylyl cyclase (membrane form), parathyroid hormone receptor PTH2, galanin receptor 2, 5- hydroxytryptamine (serotonin) receptor 2B, guanine nucleotide-binding protein G(I)/G(S)/G(O) gamma-7 subunit (GNG7, GNGT7), adenylyl cyclase 4, protein kinase C-binding protein nel homolog 1, phospholipase C beta 3 (PLC-beta 3), tissue-type plasminogen activator (t-PA), NW, neural visinin-like Ca2+-binding protein, VISININ-LIKE PROTEIN 1 (VOM) (NEURAL VISMM-LIKE PROTEIN 1) (NVL-I) (NVP-I) (21KD CABP), T-cell receptor CD3 zeta subunit, P-selectin precursor, granule membrane protein 140 (GMP-140), PADGEM, CD62P, leukocyte-endothelial cell adhesion molecule 3 (LECAM3), T-cell receptor gamma subunit, kidney band 3 anion exchange protein, SLC4A1, AE1, L-selectin precursor, lymph node homing receptor, leukocyte adhesion molecule-1 (LAM-1), LY-22, lymphocyte surface MEL-14 antigen, leukocyte-endothelial cell adhesion molecule 1 (LECAM1), CD62L, myelin PO protein precursor, MPZ, MAL, T-lymphocyte maturation-associated protein, myelin protein MVP17, ErbB3 EGF receptor-related proto-oncogene, HER3, CD 3OL receptor, lymphocyte activation antigen CD30, Ki-I antigen, CD30 precursor, zinc transporter (ZnT-I), CCHB3, calcium channel (voltage-gated), DIHYDROPYRIDINB-SENSITIVE L-TYPE, CALCIUM CHANNEL BETA-3 SUBUNIT, water channel aquaporin 3 (AQP3), 3-methylcholanthrene-inducible cytochrome P450 (P450MC), cytochrome P450 IA1 (CYPIA1), sodium/potassium-transporting ATPase beta 1 subunit (ATP1B1), glucose transporter 3, ATP-sensitive inward rectifier potassium subfamily J member 8 (KCNJ8), UKATP-I, ATP-sensitive inwardly rectifying K+ channel KIR6.1, RJM, Rab3 effector in synaptic-vesicle fusion, neuronal acetylcholine receptor protein alpha-3 chain precursor, purmergic receptor P2X5, ligand-gated ion channel, sodium channel I, renal organic anion transporter (ROAT1) H- multispecific organic anion transporter (OAT1), neuronal acetylcholine receptor protein alpha 6 subunit precursor (CHRNA6, ACRA6), sodium channel, beta 1 subunit, sodium-hydrogen exchange protein-isoform 2 (NHE-2), PMCA, ATP2B2, calcium-transporting ATPase plasma membrane (brain isoform 2, EC 3.6.1.38), calcium pump, fibrinogen beta subunit (FGB), sulfonylurea receptor (SUR), glycine receptor alpha 3 subunit precursor (GLRA3), multidrug resistance protein 2 (MDR2), P-glycoprotein (PGY2), potassium channel, voltage gated, KV3.4, RAW3, KCNC4, sodium/chloride co-transporter, thiazide sensitive, synaptosomal associated protein 25, SNAP-25, SNAP, SNAP25, SUP, calcitonin receptor precursor (CT-R), C1A/C1B, gamma-aminobutyric acid (GABA-A) receptor, beta 1 subunit, NEUREXINI-BETA PRECURSOR, Non-processed neurexin I-beta Synaptic cell surface proteins + NEUREXIN I-ALPHA PRECURSOR, Non-processed neurexin I-alpha Synaptic cell surface proteins, alpha 2B adrenergic receptor (ADRA2B), alpha 2B adrenoceptor, neuropeptide Y receptor type 1, prostaglandin E2 receptor EP4 subtype, alpha 2C adrenergic receptor (ADRA2C), alpha 2C adrenoceptor, c-ErbA oncogene, thyroid hormone receptor alpha-1 (THRA1), gamma-aminobutyric acid receptor alpha 1 subunit precursor (GABA(A) receptor, (GABRA2), P2Y PURINOCEPTOR 6 (P2Y6), glutamate receptor 1 precursor (GIuR-I), GIuR-A, GIuR-K1, gamma-aminobutyric acid receptor alpha 3 subunit precursor (GABA(A) receptor, GABRA3), NMDAR2A N-METHYL-D-ASPARTATE RECEPTOR SUBUNIT, P2U PURMOCEPTOR 1 (ATP RECEPTOR) (P2U1) (PURMBRGIC RECEPTOR), 5-hydroxytryptamine (serotonin) receptor IB, 5-HTIB, glycine receptor, alpha 2A subunit, inhibitory, parathyroid

hormone receptor PTH2, 5-hydroxytryptamine 5A receptor (5HT5A, HTR5A), serotonin receptor, REC17, acetylcholine receptor alpha, brain natriuretic peptide (BNP), 5-kDa cardiac natriuretic peptide, ISO-ANP, luteinizing hormone, alpha, cocaine/amphetamine-induced rat transcript, CART, protein kinase C-binding protein nel homolog 1, 14-3-3 protein eta, PKC inhibitor protein-1, KCIP-I, plectin, NVP, neural visinin-like Ca2+-binding protein, VISININ-LIKE PROTEIN 1 (VILIP-I) (NEURAL VISININ-LIKE PROTEIN 1) (NVL-I) (NVP-I) (21 KD CABP), syndecan 3, ras-GTPase-activating protein (GAP), ras p21 protein activator, p20GAP, interleukin-6 receptor beta chain, membrane glycoprotein gplSO, prostatic secretory protein probasin (M-40), A-raf proto-oncogene, prothymosin-alpha (PTMA), cadherin 6 precursor, kidney-cadherin (K-cadherin), neurofibromin, neurofibromatosis protein type I (NFl), GTPase stimulatory protein, c-H-ras proto-oncogene, transforming G-protein p21, HSP84, HSP90-beta, heat shock 9OkD protein, Neural adhesion molecule F3, RAT NEURAL ADHESION MOLECULE F3, COMPLETE CDS, BIG-1 PROTEIN PRECURSOR, neural cell adhesion protein, neurite outgrowth-promotor, potassium channel protein, KSHIHA3, ATP-sensitive inward rectifier potassium channel subfamily J member 1 (KCNJl), KAB-I, KIRl. 1, ROMKl, Band 3 (B3RP3), 3 Cl-HCO3-anion exchanger, voltage-gated potassium channel protein KVl. 1, RBKl, RCKl, KCNAl, potassium channel, inward rectifier 9, taurine transporter, neuronal acetylcholine receptor protein alpha-3 chain precursor, sodium channel I, potassium channel protein CDRK, neuronal acetylcholine receptor protein alpha 6 subunit precursor (CHRNA6, ACRA6), calcium channel, alpha 1 beta, sodium channel, beta 1 subunit, PMCA, ATP2B2, calcium-transporting ATPase plasma membrane (brain isoform 2, EC 3.6.1.38), calcium pump, 17-kDa ubiquitin-conjugating enzyme E2 (UBE2B), ubiquitin-protein ligase, ubiquitin carrier protein, HR6B, synaptosomal associated protein 25, SNAP-25, SNAP, SNAP25, SUP, 67-kDa glutamic acid decarboxylase (GAD67), GADl, eek proto-oncogene, protein tyrosine kinase, eph/elk-related, D(IA) DOPAMINE RECEPTOR, growth hormone receptor precursor (GH receptor, GHR), serum-binding protein, NMDAR2A N-METHYL-D-ASPARTATE RECEPTOR SUBUNIT, 5-hydroxytryptamine (serotonin) receptor IB, 5-HT1B, thyroid hormone beta receptor, c-erbA-beta, gamma-aminobutyric acid (GABA-A) receptor, beta 3 subunit, glutamate receptor 2 precursor (GLUR-2, GLUR-B, GLUR-K2), glutamate receptor 4 precursor (GLUR-4, GLUR-D), cannabinoid receptor 1, neuronal, neuromedin K receptor (NKR), neurokinin B receptor, NK-3 receptor (NK-3R), GABA-A receptor gamma-2 subunit precursor, galanin receptor 2, insulin-like growth factor binding protein 1 precursor (IGFBP-I, IBP-I), pre-somatotropin, protein kinase C beta-I type (PKC-beta I) + protein kinase C beta-II type (PKC-beta D), guanine nucleotide-binding protein G(O) alpha subunit (GNAO, GNAO), guanine nucleotide-binding protein G(I) alpha 1 subunit (GNAIl), adenylate cyclase-inhibiting G alpha protein, serine/threonine kinase PCTAIRE2 (PCTK2), protein kinase C-binding protein nel homolog 1, PKI-alpha, cAMP-dependent protein kinase inhibitor (muscle/brain form), 14-3-3 protein eta, PKC inhibitor protein-1, KCIP-I, and NW, or neural visinin-like Ca2+-binding protein, VISINlN-LIKE PROTEIN 1 (VILIP-I) (NEURALVISININ-LIKE PROTEIN 1) (NVL-I) (NVP-I) (21 KD CABP).

ACTIVITY - Ophthalmologic; Nootropic; Neuroprotective; Antidiabetic; Anticonvulsant; Vulnerary; Antiparkinsonian; Cytostatic. No biological data given.

MECHANISM OF ACTION - Gene-Therapy.

USE - The methods and compositions are useful for the diagnosis, prevention and/or treatment of diseases or conditions associated with neuronal cell death, such as optic nerve degeneration, Alzheimer's disease, diabetic retinopathy, Huntington's disease, spinal cord injury,

Parkinson's disease, glaucoma, neuronal tumor and age-related macular degeneration (claimed).

ADMINISTRATION - Routes of administration of the pharmaceutical compositions include intramuscular, intraperitoneal, intravenous, subcutaneous, intrarectal, transdermal and intranasal. No dosages given.

EXAMPLE - No relevant example given.(122 pages)

L2 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
AN 2000:472152 CAPLUS
DN 133:204315
TI DNA-binding sequence of the human prostate-specific homeodomain protein NKX3.1
AU Steadman, David J.; Giuffrida, Domenica; Gelmann, Edward P.
CS Department of Oncology, Lombardi Cancer Center, Georgetown University School of Medicine, DC, 20007-2197, USA
SO Nucleic Acids Research (2000), 28(12), 2389-2395
CODEN: NARHAD; ISSN: 0305-1048
PB Oxford University Press
DT Journal
LA English
AB NKX3.1 is a member of the NK class of homeodomain proteins and is most closely related to Drosophila NK-3. NKX3.1 has predominantly prostate-specific expression in the adult human. Previous studies suggested that NKX3.1 exerts a growth-suppressive effect on prostatic epithelial cells and controls differentiated glandular functions. Using a binding site selection assay with recombinant NKX3.1 protein we identified a TAAGTA consensus binding sequence that has not been reported for any other NK class homeoprotein. By electromobility shift assay we demonstrated that NKX3.1 preferentially binds the TAAGTA sequence rather than the binding site for Nkx2.1 (CAAGTG) or Msx1 (TAATTG). Using mutated binding sites in competitive gel shift assays, we analyzed the nucleotides in the TAAGTA consensus sequence that are important for NKX3.1 binding. The consensus binding site of a naturally occurring polymorphic NKX3.1 protein with arginine replaced by cysteine at position 52 was identical to the wild-type binding sequence. The binding affinities of wild-type and polymorphic NKX3.1 for the TAAGTA consensus site were very similar, with values of 20 and 22 nM, resp. Wild-type and polymorphic NKX3.1 specifically repressed transcription of luciferase from a reporter vector with three copies of the NKX3.1-binding site upstream from a thymidine kinase promoter. The data show that among NK family proteins NKX3.1 binds a novel DNA sequence and can behave as an in vitro transcriptional repressor.
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1999:35000 CAPLUS
DN 130:106044
TI Human prostate specific gene NKX3.1 and protein and diagnosis and treatment of cancer
IN Carter, Kenneth C.; He, Wei-wu
PA Human Genome Sciences, Inc., USA
SO PCT Int. Appl., 138 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9900498	A1	19990107	WO 1998-US13252	19980626
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2295303	AA	19990107	CA 1998-2295303	19980626

	EP 996725	A1	20000503	EP 1998-931606	19980626
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002510974	T2	20020409	JP 1999-505740	19980626
	US 2003022275	A1	20030130	US 1998-105470	19980626
	US 6617129	B2	20030909		
PRAI	US 1997-51080P	P	19970627		
	WO 1998-US13252	W	19980626		

AB The present invention relates to a novel member of the NK family of homeobox genes. In particular, isolated nucleic acid mols. are provided encoding the human NK-3 prostate specific gene 1 (NKX3.1) protein. NKX3.1 polypeptides are also provided as are vectors, host cells and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of NKX3.1 activity. Also provided are diagnostic methods for detecting prostate cancer and other cancers and therapeutic methods for prostate cancer and other cancers. Thus, cDNA for the prostate-specific human gene NKX3.1, which maps to 8p21 and encodes a homeodomain-containing protein related to the Drosophila NK gene family, was cloned. The gene may play a role in both prostate development and the androgen-driven maintenance of prostatic differentiation in adults. The expression of NKX3.1 in adult humans was found to be restricted to prostate and testes. When assayed in several cell lines, including 3 lines derived from prostate carcinoma tissue, the gene was expressed solely in the androgen-dependent prostate carcinoma cell line LNCaP. In these cells, NKX3.1 gene expression is regulated by androgens. The new gene NKX3.1 is a candidate for playing a central role in the opposing processes of androgen-driven differentiation of prostatic tissue and loss of that differentiation during the progression of prostate cancer.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 2
AN 1997:21335 CAPLUS
DN 126:184178
TI Prostate-specific and androgen-dependent expression of a novel homeobox gene
AU Bieberich, Charles J.; Fujita, Kazuyuki; He, Wei-Wu; Jay, Gilbert
CS Dep. Virol., Jerome H. Holland Lab., Rockville, MD, 20855, USA
SO Journal of Biological Chemistry (1996), 271(50), 31779-31782
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
AB A new member of the mouse NK family of homeobox genes that is related to Drosophila NK-3 has been identified. Expression of this gene, termed Nkx-3.1, is largely restricted to the prostate gland in adult animals. The level of Nkx-3.1 mRNA decreases markedly in response to castration, suggesting that its expression is androgen-dependent. In situ hybridization analyses demonstrated that expression of Nkx-3.1 in the prostate is confined to epithelial cells. In newborns, Nkx-3.1 mRNA is detected in the urethral epithelium that is being induced by the surrounding mesenchyme to invaginate to form prostatic buds. Together, these observations suggest that the Nkx-3.1 protein, which likely functions as a transcription factor, plays a prominent role both in the initiation of prostate development and in the maintenance of the differentiated state of prostatic epithelial cells.

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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***EMCare (File 45)
***Trademarkscan - South Korea (File 655)
***Regulatory Affairs Journals (File 183)
***Index Chemicus (File 302)
***Inspec (File 202)

RESUMED UPDATING
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      Set  Items  Description
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Cost is in DialUnits
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B 155, 159, 10, 203, 35, 5, 467, 73, 434, 34
       13sep06 11:12:02 User290558 Session D74.1
            $1.03    0.294 DialUnits File1
     $1.03  Estimated cost File1
     $0.13  INTERNET
     $1.16  Estimated cost this search
     $1.16  Estimated total session cost   0.294 DialUnits

SYSTEM:OS  - DIALOG OneSearch
  File 155:MEDLINE(R) 1950-2006/Sep 12
         (c) format only 2006 Dialog
  File 159:Cancerlit 1975-2002/Oct
         (c) format only 2002 Dialog
 *File 159: Cancerlit is no longer updating.
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  File  34:SciSearch(R) Cited Ref Sci 1990-2006/Sep W1
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      Set  Items  Description
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S NK-3 AND PROSTATE AND PROTEIN
              74  NK-3
          352181  PROSTATE
         6879478  PROTEIN
      S1       0  NK-3 AND PROSTATE AND PROTEIN
?

S NK (N) 3 AND PROSTATE
Processing
Processed  10 of  10 files ...
Completed processing all files
          115237  NK
        12311711  3
            1926  NK(N)3
          352181  PROSTATE
      S2      15  NK (N) 3 AND PROSTATE
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RD S2
      S3       5  RD S2  (unique items)
?

TYPE S3/FULL/1-5

  3/9/1     (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2006 Dialog. All rts. reserv.

14025484   PMID: 12450213
 The smooth muscle gamma-actin gene is androgen responsive in prostate
 epithelia.
  Filmore R A; Dean D A; Zimmer W E
  Department of Cell Biology and Neuroscience, University of South Alabama,
Mobile, AL 36688, USA.
  Gene expression (United States)     2002, 10   (5-6)   p201-11, ISSN
1052-2166--Print   Journal Code: 9200651
  Contract/Grant No.: R01-H159956; PHS
  Publishing Model Print
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Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS

Nkx 3.1 is an evolutionarily conserved vertebrate homolog of the Drosophila Nk-3 homeodomain gene bagpipe that is expressed by a variety of cells during early mammalian development and has been shown to be a critical factor for prostate development and function. Previous studies utilizing a heterologous cell transfection strategy from our laboratory identified the smooth muscle gamma-actin (SMGA) gene as a novel molecular target of Nkx 3.1 regulatory activity. In the studies presented here, SMGA gene activity and regulation were evaluated in normal and cancerous prostate epithelial cells. SMGA transcripts were demonstrated in prostate epithelia and SMGA mRNA levels were increased in androgen-responsive LNCaP cancer and normal prostate epithelial cells. SMGA gene transcriptional activity was androgen responsive in these cells and required a segment of the human SMGA promoter containing NKE and SRF (serum response factor) binding elements. This region of the human SMGA proximal promoter is well conserved across species and is synergistically activated by coexpression of Nkx 3.1 and SRF in heterologous CV-1 cells. SMGA transcription was not responsive to steroid in PC-3 prostate epithelial cancer cells, which do not express Nkx 3.1. However, SMGA transcription was influenced by expression of androgen receptor in these cells, a situation that allows the androgen-dependent expression of Nkx 3.1. Furthermore, SMGA gene activity was influenced by direct Nkx 3.1 expression in the PC-3 cells. Thus, SMGA gene activity in prostate epithelia is due, in part, to the androgen-dependent expression of Nkx 3.1. As such, our studies provide the initial description of Nkx 3.1 target gene regulatory activity in the prostate.

Tags: Male

Descriptors: *Actins--genetics--GE; *Actins--physiology--PH; *Androgens --metabolism--ME; *Epithelium--metabolism--ME; *Muscle, Smooth--metabolism --ME; *Prostate--metabolism--ME; Adolescent; Animals; Base Sequence; Blotting, Northern; Cell Line; Gene Expression Regulation; Homeodomain Proteins--metabolism--ME; Humans; Luciferases--metabolism--ME; Molecular Sequence Data; Promoter Regions (Genetics); Prostatic Neoplasms--metabolism --ME; Protein Binding; RNA, Messenger--metabolism--ME; Research Support, U.S. Gov't, P.H.S.; Sequence Homology, Nucleic Acid; Serum Response Factor --metabolism--ME; Transcription Factors--metabolism--ME; Transcription, Genetic; Transfection; Tumor Cells, Cultured

CAS Registry No.: 0 (Actins); 0 (Androgens); 0 (Homeodomain Proteins); 0 (NKX3-1 protein, human); 0 (RNA, Messenger); 0 (Serum Response Factor); 0 (Transcription Factors)

Enzyme No.: EC 1.13.12.- (Luciferases)
Record Date Created: 20021126
Record Date Completed: 20030513

3/9/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

12764111 PMID: 10871372
DNA-binding sequence of the human prostate-specific homeodomain protein NKX3.1.

Steadman D J; Giuffrida D; Gelmann E P
Department of Oncology, Lombardi Cancer Center, Georgetown University School of Medicine, 3800 Reservoir Road NW, Washington, DC 20007-2197, USA.

Nucleic acids research (ENGLAND) Jun 15 2000, 28 (12) p2389-95,

ISSN 1362-4962--Electronic Journal Code: 0411011
Contract/Grant No.: ES-09888; ES; NIEHS
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS

NKX3.1 is a member of the NK class of homeodomain proteins and is most closely related to DROSOPHILA: NK-3. NKX3.1 has predominantly prostate-specific expression in the adult human. Previous studies suggested that NKX3.1 exerts a growth-suppressive effect on prostatic epithelial cells and controls differentiated glandular functions. Using a binding site selection assay with recombinant NKX3.1 protein we identified a TAAGTA consensus binding sequence that has not been reported for any other NK class homeoprotein. By electromobility shift assay we demonstrated that NKX3.1 preferentially binds the TAAGTA sequence rather than the binding site for Nkx2.1 (CAAGTG) or Msx1 (TAATTG). Using mutated binding sites in competitive gel shift assays, we analyzed the nucleotides in the TAAGTA consensus sequence that are important for NKX3.1 binding. The consensus binding site of a naturally occurring polymorphic NKX3.1 protein with arginine replaced by cysteine at position 52 was identical to the wild-type binding sequence. The binding affinities of wild-type and polymorphic NKX3.1 for the TAAGTA consensus site were very similar, with values of 20 and 22 nM, respectively. Wild-type and polymorphic NKX3.1 specifically repressed transcription of luciferase from a reporter vector with three copies of the NKX3.1-binding site upstream from a thymidine kinase promoter. The data show that among NK family proteins NKX3.1 binds a novel DNA sequence and can behave as an in vitro transcriptional repressor.

Tags: Male
Descriptors: *DNA--chemistry--CH; *DNA--metabolism--ME; *Homeodomain Proteins--metabolism--ME; *Oligodeoxyribonucleotides--chemistry--CH; *Spermatozoa--metabolism--ME; *Transcription Factors--metabolism--ME; Base Sequence; Binding Sites; Consensus Sequence; Genes, Tumor Suppressor; Humans; Kinetics; Oligodeoxyribonucleotides--metabolism--ME; Recombinant Proteins--metabolism--ME; Research Support, U.S. Gov't, Non-P.H.S.; Research Support, U.S. Gov't, P.H.S.
CAS Registry No.: 0 (Homeodomain Proteins); 0 (NKX3-1 protein, human); 0 (Oligodeoxyribonucleotides); 0 (Recombinant Proteins); 0 (Transcription Factors); 9007-49-2 (DNA)
Record Date Created: 20000727
Record Date Completed: 20000727

3/9/3 (Item 3 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

11130657 PMID: 8943214

Prostate-specific and androgen-dependent expression of a novel homeobox gene.

Bieberich C J; Fujita K; He W W; Jay G
Department of Virology, Jerome H. Holland Laboratory, Rockville, Maryland 20855, USA.

Journal of biological chemistry (UNITED STATES) Dec 13 1996, 271 (50) p31779-82, ISSN 0021-9258--Print Journal Code: 2985121R
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM

Record type: MEDLINE; Completed
Subfile: INDEX MEDICUS

A new member of the mouse NK family of homeobox genes that is related to Drosophila NK-3 has been identified. Expression of this gene, termed Nkx-3.1, is largely restricted to the prostate gland in adult animals. The level of Nkx-3.1 mRNA decreases markedly in response to castration, suggesting that its expression is androgen-dependent. In situ hybridization analyses demonstrated that expression of Nkx-3.1 in the prostate is confined to epithelial cells. In newborns, Nkx-3.1 mRNA is detected in the urethral epithelium that is being induced by the surrounding mesenchyme to invaginate to form prostatic buds. Together, these observations suggest that the Nkx-3.1 protein, which likely functions as a transcription factor, plays a prominent role both in the initiation of prostate development and in the maintenance of the differentiated state of prostatic epithelial cells.

Tags: Male

Descriptors: *Androgens--metabolism--ME; *Genes, Homeobox; *Homeodomain Proteins--genetics--GE; *Prostate--metabolism--ME; *Transcription Factors --genetics--GE; Amino Acid Sequence; Animals; Animals, Newborn; Blotting, Northern; Drosophila Proteins; Gene Expression Regulation, Developmental; In Situ Hybridization; Mice; Molecular Sequence Data; RNA, Messenger --metabolism--ME

Molecular Sequence Databank No.: GENBANK/U73460

CAS Registry No.: 0 (Androgens); 0 (Drosophila Proteins); 0 (Homeodomain Proteins); 0 (Nkx3-1 protein, mouse); 0 (RNA, Messenger); 0 (Transcription Factors); 0 (vnd protein, Drosophila)

Record Date Created: 19970117
Record Date Completed: 19970117

3/9/4 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0014501189 BIOSIS NO.: 200300469908
Human NK-3 related prostate specific gene-1
AUTHOR: He Wei-Wu (Reprint); Carter Kenneth C
JOURNAL: Official Gazette of the United States Patent and Trademark Office Patents 1274 (2): Sep. 9, 2003 2003
MEDIUM: e-file
PATENT NUMBER: US 6617129 PATENT DATE GRANTED: September 09, 2003 20030909
PATENT CLASSIFICATION: 435-691 PATENT ASSIGNEE: Human Genome Sciences, Inc. PATENT COUNTRY: USA
ISSN: 0098-1133 _(ISSN print)
DOCUMENT TYPE: Patent
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The present invention relates to a novel member of the NK family of homeobox genes. In particular, isolated nucleic acid molecules are provided encoding the human NK-3 prostate specific gene 1 (NKX3.1) protein. NKX3.1 polypeptides are also provided as are vectors, host cells and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of NKX3.1 activity. Also provided are diagnostic methods for detecting prostate cancer and other cancers and therapeutic methods for prostate cancer and other cancers.

DESCRIPTORS:
MAJOR CONCEPTS: Medical Genetics--Allied Medical Sciences; Methods and

Techniques; Oncology--Human Medicine, Medical Sciences
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: human (Hominidae)
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
DISEASES: prostate cancer--neoplastic disease, reproductive system disease/male, urologic disease, diagnosis, therapy
MESH TERMS: Prostatic Neoplasms (MeSH)
CHEMICALS & BIOCHEMICALS: human NK-3 prostate specific gene 1 protein--activity
GENE NAME: human NK-3 prostate specific gene 1 (Hominidae) {human NKX3.1}
CONCEPT CODES:
03508 Genetics - Human
12504 Pathology - Diagnostic
12512 Pathology - Therapy
15506 Urinary system - Pathology
16506 Reproductive system - Pathology
24001 Neoplasms - Diagnostic methods
24004 Neoplasms - Pathology, clinical aspects and systemic effects
24008 Neoplasms - Therapeutic agents and therapy
BIOSYSTEMATIC CODES:
86215 Hominidae

3/9/5 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0010377488 BIOSIS NO.: 199699011548
Pharmacological characterization of tachykinin NK-2 receptors on isolated human urinary bladder, prostatic urethra and prostate
AUTHOR: Palea Stefano (Reprint); Corsi Mauro; Artibani Walter; Ostardo Edoardo; Pietra Claudio
AUTHOR ADDRESS: Glaxo Res. Lab., Via Fleming 4, 37135 Verona, Italy**Italy
JOURNAL: Journal of Pharmacology and Experimental Therapeutics 277 (2): p 700-705 1996 1996
ISSN: 0022-3565
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The contractile effect of two highly potent, selective and peptidase-resistant neurokinin (NK) 1 and NK-2 receptor agonists, namely delta-Aminovaleryl-(L-Pro-9, N-MeLeu-10)substance P-(7-11) (GR 73632) and Lys-3, Gly-8-R-gamma-lactam-Leu-9)NKA-(3-10) GR 64349), respectively, was investigated on smooth muscle strips dissected from specimens of human detrusor, prostatic urethra and prostate. Furthermore, the potencies of two peptidic NK-2 receptor agonists, GR 87389 and L 659,837, in antagonizing GR 64349-induced contractions were compared in these three tissues. In human detrusor muscle the rank order of agonist potency was: (beta Ala-8 (NKA-(4-10)) gt GR 64349 mchgt NKA-(4-10) mchgt SP = GR 73632 mchgt SP-methylester. The NK-2 receptor antagonist, GR 87389, antagonized GR 64349-induced contractions in a competitive manner, whereas L 659,837 was a noncompetitive antagonist. In the prostatic urethra the rank order of agonist potency was GR 64349 gt NKA-(4-10) gt SP gt GR 73632, whereas in the prostate it was: GR 64349 mchgt (beta Ala-8 (NKA-(4-10)) gt NKA-(4-10) gt SP; GR 73632 was ineffective up to 30 mu-M. In the prostatic urethra and in the prostate GR 87389 was a noncompetitive antagonist with a potency similar to that exhibited in the detrusor. On

the contrary, L 659,837 appeared to be a competitive antagonist in the prostate and in the prostatic urethra, having approximately the similar potency in these two tissues. The selective NK-3 agonist senktide was ineffective up to 30 mu-M in all three tissues. These results are discussed in the view of the proposed NK-2 receptor subtypes and considering possible therapeutic implications in the treatment of urinary bladder disorders.

REGISTRY NUMBERS: 133156-06-6: GR 73632; 137593-52-3: GR 64349; 153569-98-3 : GR 87389; 125989-10-8: L 659,837
DESCRIPTORS:
MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Cell Biology; Endocrine System--Chemical Coordination and Homeostasis; Membranes--Cell Biology; Muscular System--Movement and Support; Nervous System--Neural Coordination; Pharmacology; Reproductive System--Reproduction; Urinary System--Chemical Coordination and Homeostasis
BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: Hominidae (Hominidae)
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates; Vertebrates
CHEMICALS & BIOCHEMICALS: GR 73632; GR 64349; GR 87389; L 659,837
MISCELLANEOUS TERMS: DETRUSOR MUSCLE; GR 64349; GR 73632; GR 87389; L 659,837; SMOOTH MUSCLE; THERAPEUTIC POTENTIAL
CONCEPT CODES:
02506 Cytology - Animal
10060 Biochemistry studies - General
10064 Biochemistry studies - Proteins, peptides and amino acids
10506 Biophysics - Molecular properties and macromolecules
10508 Biophysics - Membrane phenomena
12512 Pathology - Therapy
15504 Urinary system - Physiology and biochemistry
16504 Reproductive system - Physiology and biochemistry
17020 Endocrine - Neuroendocrinology
17504 Muscle - Physiology and biochemistry
20504 Nervous system - Physiology and biochemistry
22005 Pharmacology - Clinical pharmacology
22028 Pharmacology - Reproductive system
22032 Pharmacology - Urinary system
BIOSYSTEMATIC CODES:
86215 Hominidae
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